Improving Budgeting Using a Computerized Model

Vladimir, Russia

Background

Traditional budget practices in Russia, a legacy from the Soviet era, are based on federally dictated bookkeeping and control mechanisms that fail to give municipal officials an in-depth understanding of their city's budget. Also, budget information has rarely been available to the public. After exposure to the U.S. practice of using budgets as management tools, however, some Russian municipal officials wanted the budget process to be better understood by both decision-makers and citizens. A computerized model developed from experience in other countries was therefore adapted to the Russian Federation to analyze expenditure and revenue trends and fiscal conditions and display the relationships in a format understandable to the public and city officials.

Innovation

Beginning in April 1995, the City of Vladimir (population 1.6 million) developed the Budget Analysis and Transparency (BAT) model, a computerized representation of the current city and district budget frameworks in Russia. The model gives city officials the ability to perform trend and comparative analyses of revenues and expenditures. It can also be used for simple revenue forecasting by extrapolating from historical data. By assembling, analyzing, and displaying monthly budget data, cities can improve the efficiency of the decision-making process and formalize and automate their budget planning process. The user-friendly graphics of the BAT model facilitate presentation of fiscal information to citizens at budget hearings and to potential creditors. The model also offers several debt financing options and estimates the city's debt carrying capacity. The model can thus focus debate among decision-makers on the most critical areas for reform and can support investigation of the potential impact of revenue and expenditure alternatives.

The basic input into the model is a standard monthly report on revenues and expenditures, which is easily converted into spreadsheets for manipulation and analysis. The model is capable of storing and tracking five years of financial data. Other required inputs include monthly and annual consumer price indexes and population estimates. The model can group revenue items by taxing authority, adjust for inflation, make per capita calculations, and show percentage changes from year to year. To operate the model the city uses a 486 computer, Microsoft® Windows and Excel software, and a color printer. The Russian model was developed in three months and customized for Vladimir in six weeks. After two weeks of training the Vladimir city staff began to use the BAT model in October 1995.

Results

The Mayor of Vladimir used many of the graphs and charts generated by the BAT model during pre-election public meetings, and the Vladimir Department of Prospective Development has used the model to analyze the city's fiscal conditions. Because of the uniform budget reporting system left over from the Soviet era, the model's structure is valid for cities throughout NIS and can thus be easily replicated in NIS. The model has already been installed in five other cities in the Russian Federation. The BAT model is simple and straightforward, is fairly low cost, and is particularly suitable for small and medium sized cities. Replication in other countries outside NIS would require substantial adjustments to the model.

Summary

To allow the budget process to be better understood by both decision-makers and citizens, the City of Vladimir created a computerized budget analysis model. The Mayor has used graphs and charts generated by the model during public meetings, and the Department of Prospective Development has used the model to analyze the city's fiscal conditions.

For more information contact:

Natalya Novikova, Chief Systems Expert, Vladimir Tel. 7-09222-37521